## **CLAIMS**

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- A method of maintaining two-way asynchronous
   communication between a client and a web server using a single HTTP transaction,
   comprising:
- communicating an HTTP request from a client to a web server, wherein the HTTP request is configured to initialize a CGI that operates within or in conjunction with the web server; and

executing operations associated with the CGI, wherein the operations are configured to perform the two-way asynchronous communication with the client until terminated by the client or the CGI.

- 2. The method of claim 1, wherein executing operations includes receiving and processing data from the client.
- The method of claim 2, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.
  - 4. The method of claim 1, wherein executing operations includes creating and communicating data from the CGI to the client.

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- 5. The method of claim 4, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.
- 6. The method of claim 1, wherein the client includes client-side logic configured to perform the two-way asynchronous communication with the CGI.
  - 7. The method of claim 6, wherein the client-side logic is preinstalled on the client.

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- 8. The method of claim 6, wherein the client-side logic is dynamically delivered to the client from the web server.
- 9. A system for maintaining two-way asynchronous5 communication between a client and a web server using a single HTTP transaction, comprising:

means for communicating an HTTP request from a client to a web server , wherein the HTTP request is configured to initialize a CGI that operates within or in conjunction with the web server; and

means for executing operations associated with the CGI, wherein the operations are configured to perform the two-way asynchronous communication with the client until terminated by the client or the CGI.

- The method of claim 9, wherein the executing means includes means for receiving and processing data from the client.
  - The method of claim 10, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.
- The method of claim 9, wherein the executing means includes means for creating and communicating data from the CGI to the client.
- 13. The method of claim 12, wherein the data is compliant with the HTTP protocol or a protocol other than HTTP.
- 14. The method of claim 9, wherein the communicating means includes client-side logic configured to perform the two-way asynchronous communication with the CGI.

- 15. The method of claim 14, wherein the client-side logic is preinstalled on the client.
- 16. The method of claim 14, wherein the client-side logic is

  dynamically delivered to the client from the web server.
  - The method of claim 16, wherein the client-side logic is delivered in the form of a Java $^{TM}$  applet.
- 18. The method of claim 16, wherein the client-side logic is delivered in the form of Macromedia Shockwave movie.
  - 19. The method of claim 9, wherein the CGI is a servlet.